

Diffraction 2012

Monday, 10 September 2012 - Saturday, 15 September 2012

Puerto del Carmen, Lanzarote

Scientific Programme

Diffraction in e-p collisions (experiment)

- inclusive DIS: total cross sections, structure functions, heavy flavors
- inclusive diffraction and dijets in DIS
- hard diffractive photoproduction
- exclusive final states in diffractive DIS (vector mesons, DVCS, etc.).

Convener: Marta Ruspa

Diffraction in DIS (phenomenology/theory)

- inclusive DIS, structure functions and partonic densities
- inclusive diffractive DIS
- vector meson production
- generalized parton distributions
- Analyticity/duality models of inclusive/diffractive reactions: Pomeron trajectory.

Convener: Douglas Ross

Forward physics in hadron-hadron collisions

- soft and hard diffraction at the hadron colliders (RHIC, Tevatron, LHC)
- total and inelastic cross section measurements
- central exclusive production (RHIC, Tevatron, LHC)
- forward physics at the LHC
- gamma-p and gamma-gamma collisions at hadron colliders
- Low-x physics at LHC.

Convener: Christina Mesropian

Diffraction in hadron-hadron collisions

- single and double diffraction dissociation
- multi-gap diffraction
- diffractive Higgs production at Tevatron and LHC
- diffractive Higgs production at large Feynman x
- phenomenology of gap survival probability
- Monte Carlo for soft processes.

Convener: Boris Kopeliovich

LHC and post-LHC

- results from LHC
- prospects for QCD studies in the post-LHC era
- high-energy QCD and astrophysics.

Convener: Risto Orava

Spin Physics

- new results on spin physics
- spin and polarization physics
- prospects in spin physics.

Conveners: Zein-Eddine Meziani, Jacques Soffer

Diffraction in nuclear physics

- heavy ion collisions at RHIC
- phenomenology of diffraction off nuclei
- QCD studies of nuclear collisions
- new physics via QCD processes at LHC.

Convener: Wlodek Guryń

Saturation

- new results within the Color Glass Condensate model
- saturation and evolution
- diffraction from non-perturbative QCD.

Convener: Larry McLerran

Progress in QCD

- perturbative QCD and factorization issues
- leading-twist diffraction and the breakdown of pQCD factorization theorems
- leading-twist diffractive DIS and nuclear shadowing
- non-universal antishadowing
- progress in AdS/QCD and related topics
- diffractive dijet, hadrons light-front wavefunction from AdS/QCD, and color transparency
- new results in the BFKL physics
- new results in the color dipole/kt-factorization approach.

Convener: Dmitry Ivanov